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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) SON-2563	
	Application Number 10/501,155-Conf. #5207	Filed July 13, 2004	
	First Named Inventor Koichiro Shoji		
	Art Unit 1792	Examiner M. B. Cleveland	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant /inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>24,104/40,290</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____</p> <div style="text-align: right;"> _____ Signature <u>Ronald P. Kananen/Christopher M. Tobin</u> Typed or printed name <u>(202) 955-3750</u> Telephone number <u>October 2, 2008</u> Date</div>			
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			



Docket No.: SON-2563  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Koichiro Shoji

Application No.: 10/501,155

Confirmation No.: 5207

Filed: July 13, 2004

Art Unit: 1792

For: SURFACE TREATMENT METHOD,  
SEMICONDUCTOR DEVICE, METHOD OF  
FABRICATION SEMICONDUCTOR DEVICE  
AND TREATMENT APPARATUS

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Examiner: M. B. Cleveland

**REQUEST FOR PRE-APPEAL BRIEF PANEL REVIEW OF REJECTION**

MS AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is in full and timely response to the Office Action mailed on July 25, 2008.

Claims 1-36 and 42-53 are present in the above-identified application, with claims 1, 8, 15, 22, 29, 30, 31, 32, 33, 34, 35, 36 being independent.

*No new matter has been added.*

Reexamination in light of the following remarks is respectfully requested.

**REJECTIONS UNDER 35 U.S.C. §103**

These rejections are traversed at least for the following reasons.

**The claims** - The claims include that a *supercritical fluid of 40 C° and 8 MPa is adjusted within a concentration range of 0.1 to 2 mol %*.

**U.S. Patent No. 6,277,753 (Mullee)** - Mullee arguably teaches that typical conditions for this process range from 20 to 70 C° and 1050 and 6000 psig (Mullee at column 2, lines 58-59).

However, Mullee **fails** to disclose, teach, or suggest typical conditions that include 8 MPa.

Moreover, Mullee **fails** to disclose, teach, or suggest:

- An ammonium hydroxide expressed by the formula (1) is added as a co-solvent agent to the supercritical fluid as in claims 1, 29, 33;
- An alkanolamine expressed by the formula (2) is added as a co-solvent agent to the supercritical fluid as in claims 8, 30, 34;
- An amine fluoride expressed by the formula (3) below is added as a co-solvent agent to said supercritical fluid as in claims 15, 31, 35.

**U.S. Patent No. 6,242,165 (Vaartstra)** - Vaartstra arguably teaches that preferably, the temperature range used to remove organic material according to the present invention is in the range of about 30 C° to about 250 C° (Vaartstra at column 7, lines 54-56).

Vaartstra arguably teaches that the critical pressure of CO<sub>2</sub> is 7.38 MPa (72.8 atmospheres (atm)) (Vaartstra at column 4, lines 3-5). Further, preferably, the pressure range used to remove organic material according to the present invention is in the range of about 1 atmosphere to about 250 atmospheres (Vaartstra at column 8, lines 63-63).

However, Vaartstra *fails* to disclose, teach, or suggest a concentration range of 0.1 to 2 mol %.

Moreover, Vaartstra *fails* to disclose, teach, or suggest:

- An ammonium hydroxide expressed by the formula (1) is added as a co-solvent agent to the supercritical fluid as in claims 1, 29, 33;
- An alkanolamine expressed by the formula (2) is added as a co-solvent agent to the supercritical fluid as in claims 8, 30, 34;
- An amine fluoride expressed by the formula (3) below is added as a co-solvent agent to said supercritical fluid as in claims 15, 31, 35.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

### **OFFICIAL NOTICE**

There is no concession as to the veracity of Official Notice, if taken in any Office Action.

An affidavit or document should be provided in support of any Official Notice taken. 37 CFR 1.104(d)(2), MPEP § 2144.03. See also, *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989)(failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error).

### **EXTENSIONS OF TIME**

Please treat any concurrent or future reply, requiring a petition for an extension of time under 37 C.F.R. §1.136, as incorporating a petition for extension of time for the appropriate length of time.

### **FEES**

The Commissioner is hereby authorized to charge all required fees, fees under 37 C.F.R. §1.17, or all required extension of time fees.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

### **CONCLUSION**

This response is believed to be a complete response to the Office Action. Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of the dependent claims not explicitly addressed herein, in future papers.

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance.

Accordingly, favorable reexamination and reconsideration of the application in light of the remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

Dated: October 2, 2008

Respectfully submitted,

By 

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